

## ABSTRACT

The multiline-addressing drive method and apparatus for passive matrix liquid crystal drive simultaneously plural rows of the liquid crystal as one block of rows by using an orthogonal function. The method and apparatus allocate rotated column vectors of plural selection-equivalent orthogonal functions obtained by rotating row vectors of one orthogonal function which is used as a selection pattern for simultaneously selected row electrodes to plural divided selection time periods obtained by dividing a selection time period of one of the simultaneously selected row electrodes, respectively and allow the column vectors of every selection-equivalent orthogonal function to loop back in time series with respect to the above one block. The liquid crystal panel is driven the method. The method and apparatus eliminate COM stripes and bias concentration, both specific to the MLA drive system, to improve the display quality and, in addition, achieve reduction in power consumption and circuit downsizing.